Fig. 1

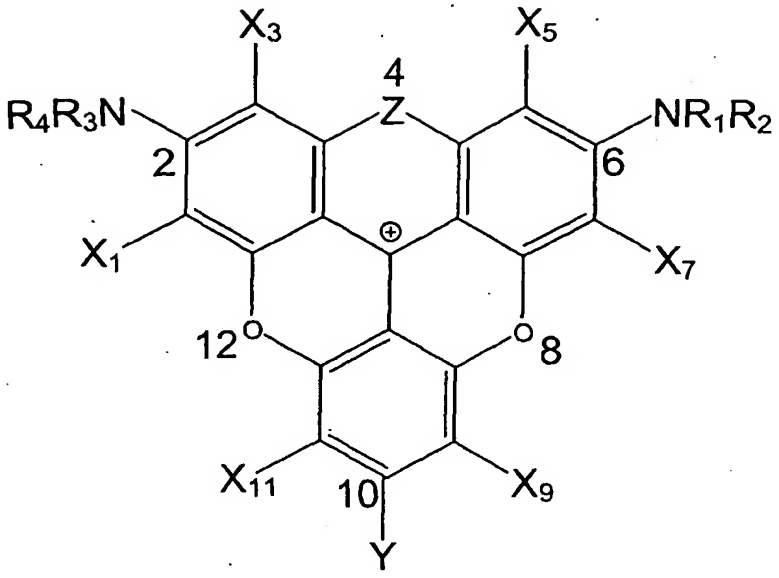

X3
X5
4
Z
R4R3N
NR1R2
2
6
X1
X7
12
O
O
8
X11
10
X9
Y

Fig. 2

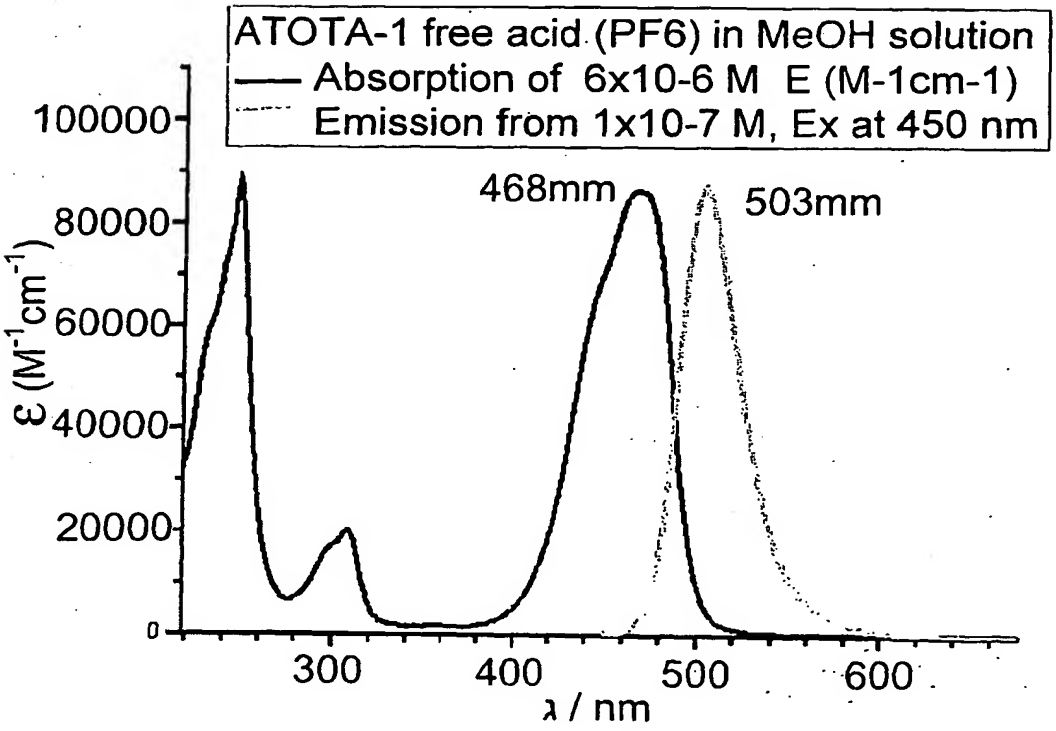

ATOTA-1 free acid (PF6) in MeOH solution
Absorption of 6x10-6 M E (M-1cm-1)
Emission from 1x10-7 M, Ex at 450 nm
468mm
503mm
100000
80000
60000
40000
20000
0
ε (M-1cm-1)
300
400
500
600
λ / nm

Fig. 3

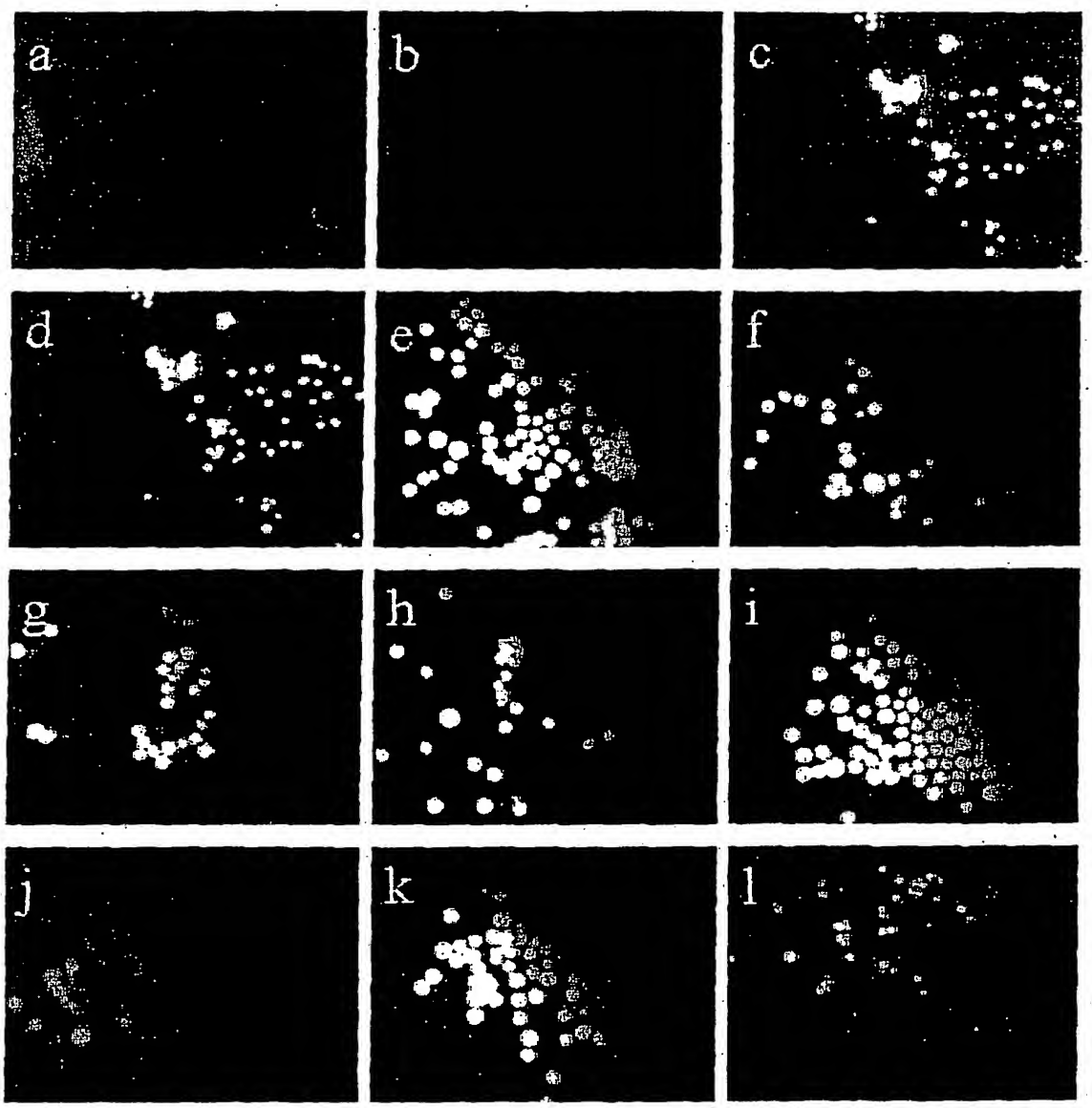
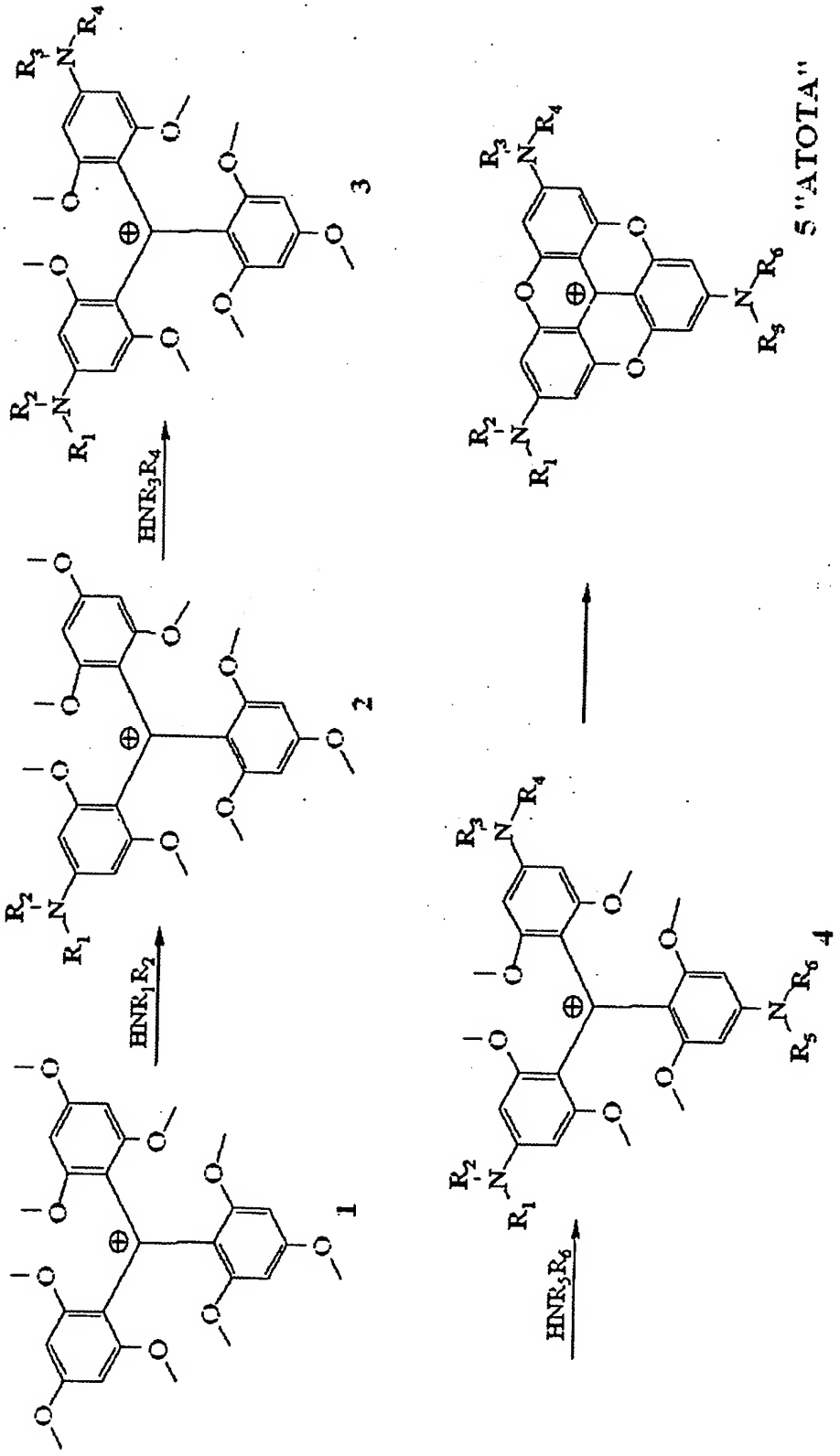


Fig. 4

Scheme 1 is illustrated herein below.



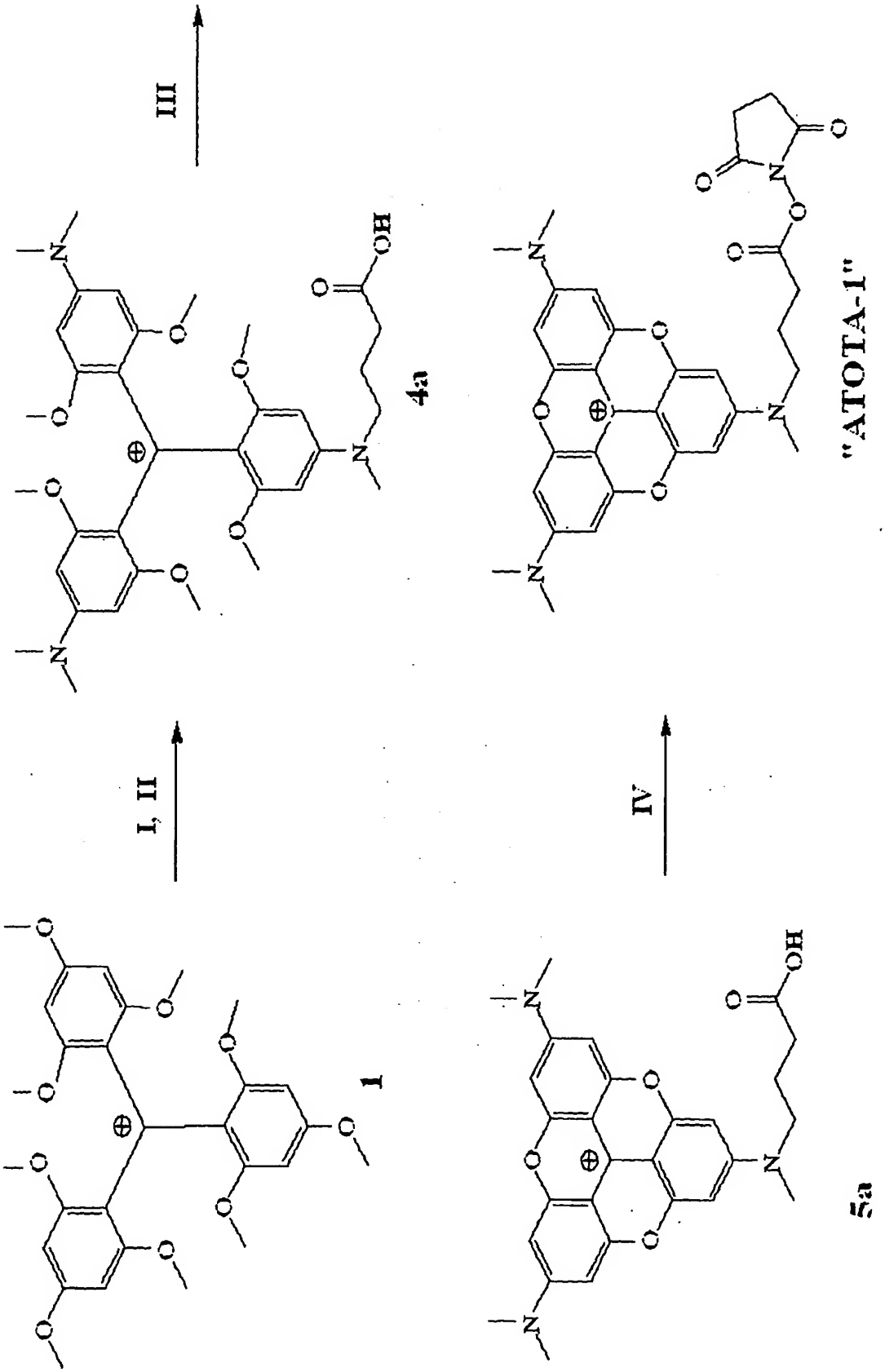


Fig. 5
Scheme 2 is illustrated herein below.

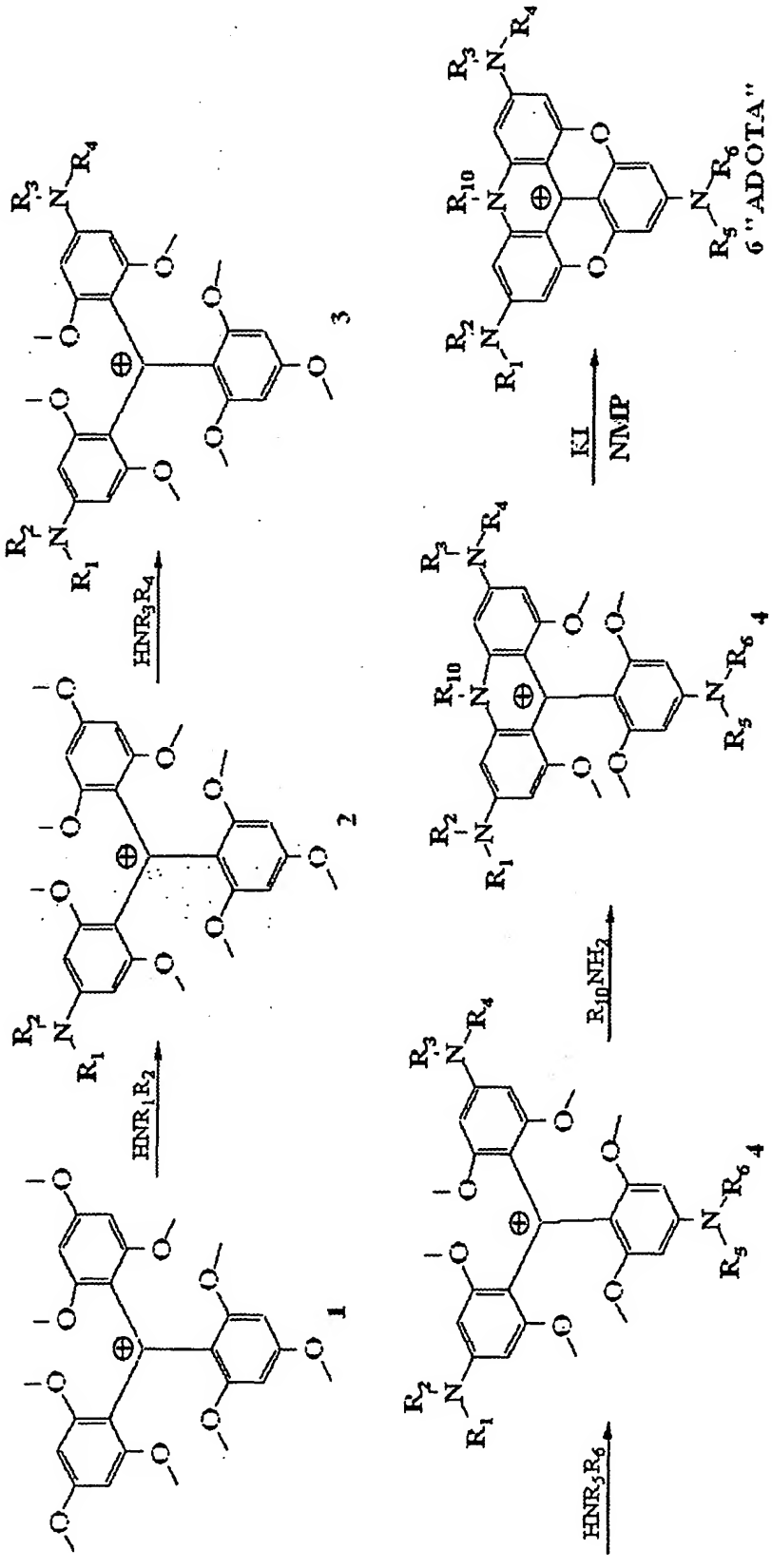


Fig. 6
Scheme 3

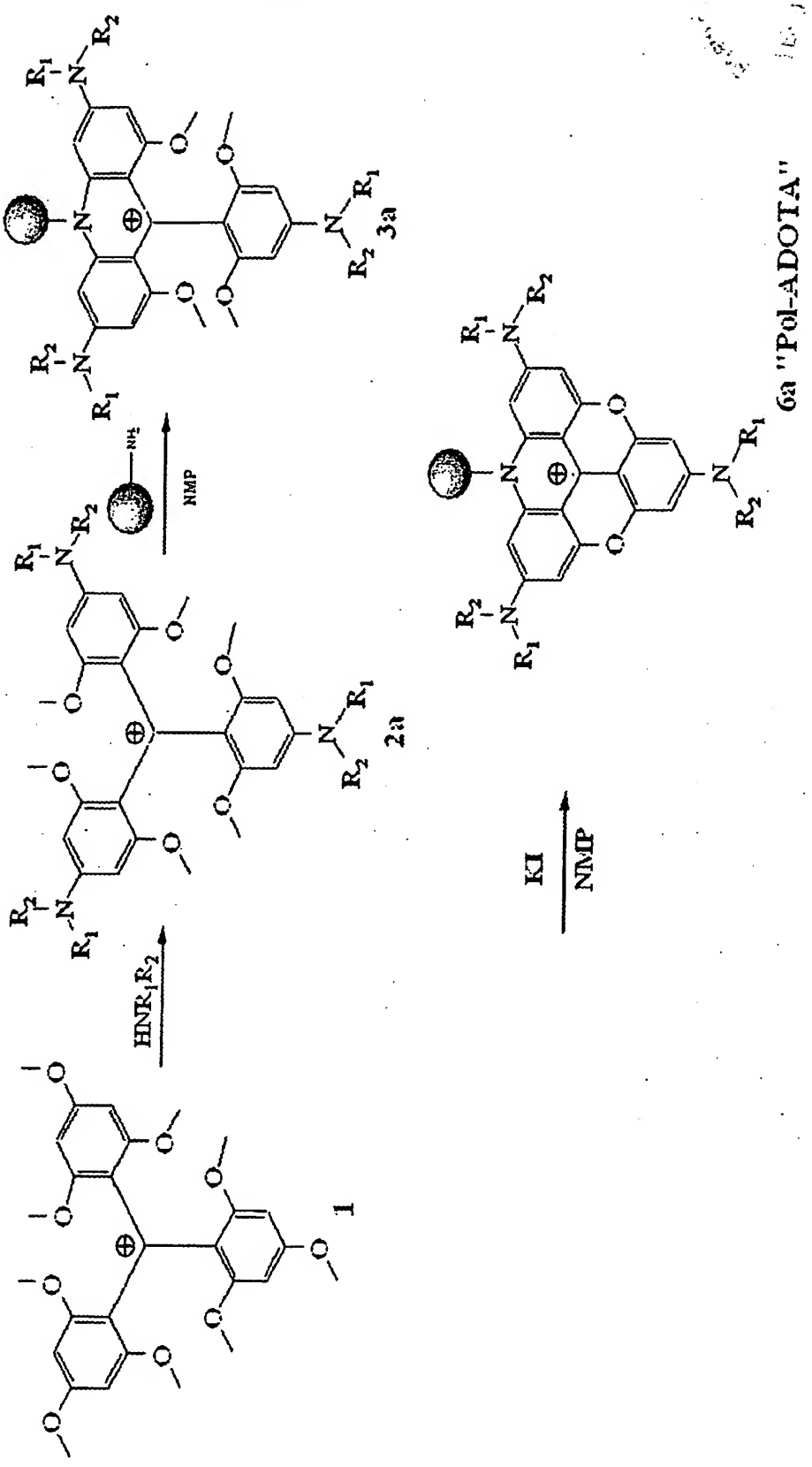


Fig. 7
Scheme 4